

Title (en)

METHODS AND SYSTEMS FOR TRACKING A MOTION OF A PROBE IN AN ULTRASOUND SYSTEM

Title (de)

VERFAHREN UND SYSTEME ZUR VERFOLGUNG EINER BEWEGUNG EINER SONDE IN EINEM ULTRASCHALLSYSTEM

Title (fr)

PROCÉDÉS ET SYSTÈMES DE SUIVI D'UN MOUVEMENT D'UNE SONDE DANS UN SYSTÈME À ULTRASONS

Publication

**EP 4243695 B1 20240612 (EN)**

Application

**EP 21805975 A 20211110**

Priority

- EP 20206848 A 20201111
- EP 2021081278 W 20211110

Abstract (en)

[origin: EP4000531A1] The invention provides for a method of generating a tracked imaging region representing ultrasound data acquired from a subject. The method comprises obtaining ultrasound data acquired from an imaging region by way of an ultrasound probe. A first image and a second image of a surface, acquired during the acquisition of the ultrasound data, are obtained by way of an image sensor coupled to the ultrasound probe. The first image and the second image are compared and a first motion component of the ultrasound probe is computed based on the comparison. A second motion component of the ultrasound probe, acquired during the acquisition of the ultrasound data, is then obtained by way of an inertial measurement unit coupled to the image sensor. The first motion component and the second motion component are combined, thereby generating a motion of the ultrasound probe, which is then combined with the ultrasound data from the imaging region, thereby generating a tracked imaging region.

IPC 8 full level

**A61B 8/08** (2006.01); **A61B 8/00** (2006.01); **A61B 8/06** (2006.01)

CPC (source: EP US)

**A61B 8/0891** (2013.01 - EP); **A61B 8/4254** (2013.01 - EP US); **A61B 8/483** (2013.01 - EP US); **A61B 8/488** (2013.01 - US);  
**A61B 8/06** (2013.01 - EP); **A61B 8/488** (2013.01 - EP)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**EP 4000531 A1 20220525**; CN 116437860 A 20230714; EP 4243695 A1 20230920; EP 4243695 B1 20240612; US 2023404528 A1 20231221;  
WO 2022101285 A1 20220519

DOCDB simple family (application)

**EP 20206848 A 20201111**; CN 202180076176 A 20211110; EP 2021081278 W 20211110; EP 21805975 A 20211110;  
US 202118035985 A 20211110